



# Office of Science

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## **Nuclear Physics Program**

**NSAC Meeting**

**February 19, 2004**

**Dennis Kovar**

**Associate Director of the Office of Science  
for Nuclear Physics**



# *Outline*

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- FY 2004 Appropriations
- FY 2005 Budget Request
- Nuclear Physics Office Activities



# ***FY 2004 Appropriations***

*(millions of dollars)*

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	<u>FY02</u>	<u>FY03</u>	<u>FY04</u>	
Research	121.4	122.8	128.0	(+ 4.2 %)
RIA R&D/SciDAC	4.8	5.9	8.0	
Facility Operations	200.3	222.4	226.9	(+ 2.0 %)
88-Inch Cyclotron	6.1	7.0	3.0	
Stewardship	<u>26.4</u>	<u>21.4</u>	<u>23.7</u>	
	359.0	379.5	389.6	

## **Priorities are:**

- To enhance support for university/laboratory researchers and theory
- To support needed investments for the future
- To effectively operate user facilities

## **Nuclear physics facilities are still operating below full utilization (at ~80%)**

- RHIC, CEBAF, ATLAS, HRIBF & Bates ~ +2 %
- LBNL 88-Inch Cyclotron terminated as user facility (USAF/NRO/NP operations)
- Operations of the MIT/Bates Facility scheduled for termination in FY 2005

## **Research support is increased**

- Theory and Experimental groups maintained ~ +3 %
- Important initiatives pursued: GRETINA/Neutron Beam Line (SNS)
- R&D for RIA, 12 GeV CEBAF upgrade & RHIC luminosity upgrade supported



# ***FY 2004: Key Activities***

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- **Research Programs Producing Outstanding Results:**
  - ▲ Quark Matter Conference – Highlighted RHIC results
  - ▲ Evidence of a “pentaquark” has solidified – observed at JLab
  
- **Facilities Performed Well:**
  - ▲ RHIC performance has been outstanding in the FY 2004 run period
  - ▲ CEBAF has recovered from the hurricane and is running well
  - ▲ ATLAS, HRIBF and MIT/Bates running well
  - ▲ 88-Inch Cyclotron – identified as critical for USAF/NRO chip testing
  
- **Initiatives Supported:**
  - ▲ MiniBooNE, HIGS, LANSCE neutron experiments, LEGS upgrade
  - ▲ SNO and KamLAND continue to take data
  - ▲ New starts: GRETINA, Neutron Beam Line (SNS), HRIBF (2nd target platform)



# *FY 2005 Budget Request*

*(millions of dollars)*

	<u>FY03</u>	<u>FY04</u>	<u>Request</u> <u>FY05</u>	
Research	122.8	128.0	131.6	(+ 2.8 %)
RIA R&D/SciDAC	5.9	8.0	6.0	
Facility Operations	209.2	214.4	229.0	(+ 6.8 %)
MIT/Bates	13.2	12.5	9.5	
88-Inch Cyclotron	7.0	3.0	3.0	
Stewardship	<u>21.4</u>	<u>23.7</u>	<u>21.9</u>	
	379.5	389.6	401.0	(+ 2.9 %)

## **Priorities are:**

- To effectively operate user facilities
- To enhance support for university/laboratory researchers and theory
- To support needed investments for the future

## **Nuclear physics facilities are approaching full utilization (at ~85%)**

- RHIC, CEBAF, ATLAS & HRIBF ~ +6.8 %
- LBNL 88-Inch Cyclotron continues operations for USAF, NRO and NP
- MIT/Bates Facility runs for 3 months & then operations are terminated

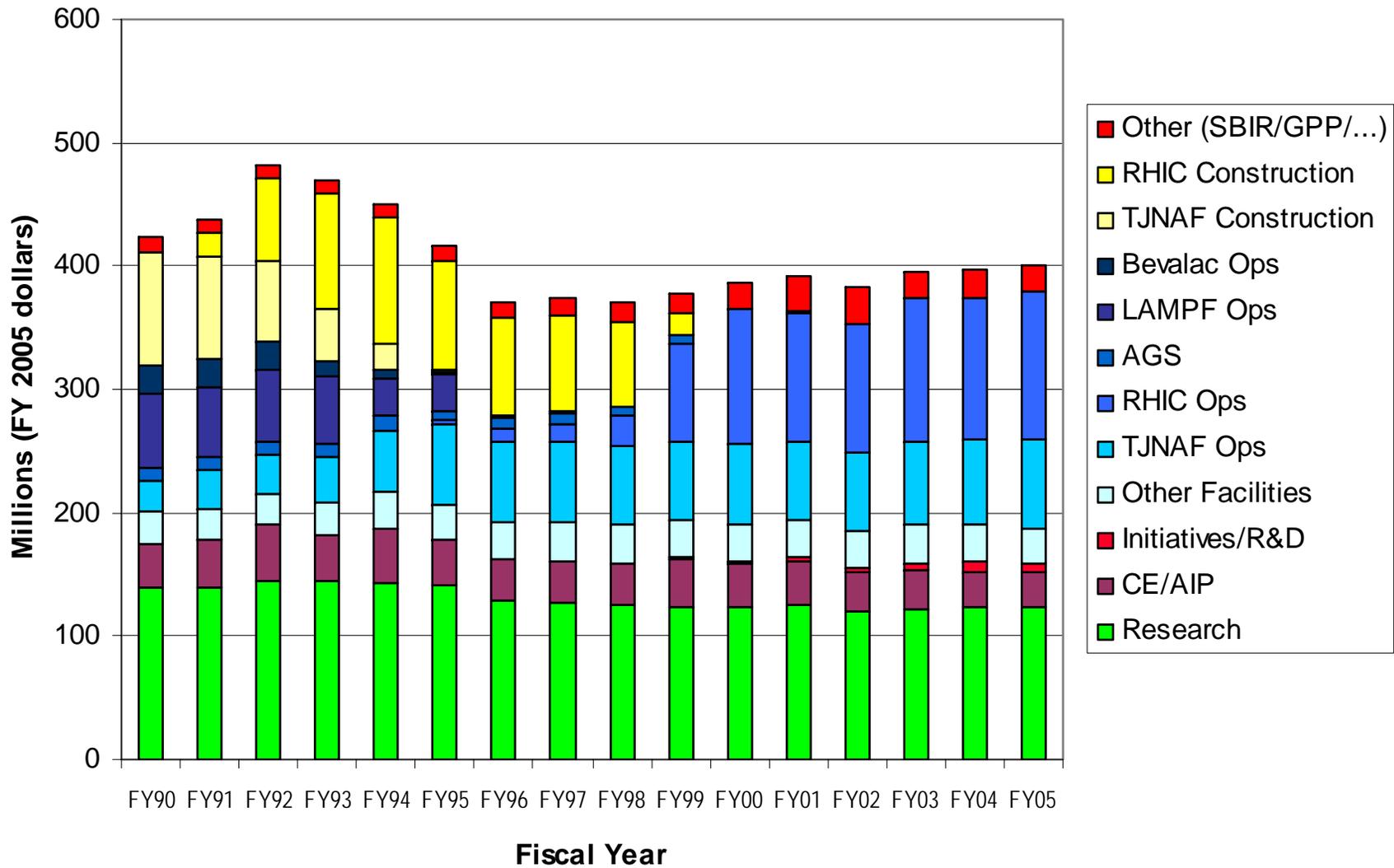
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# DOE Nuclear Physics Funding

Office of Science





# *Nuclear Physics Office Activities*

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## **Proposal Due Dates:**

- RIA R&D proposals: – decisions have been made
- Outstanding Junior Investigators (OJI): – decisions: April
- SBIR/STTR proposals: – decisions: April

## **Preparing for FY 2006 Budget Exercise (pre-CRB, CRB, OMB & President)**

- Laboratory Management Budget Briefings: next two weeks

## **Office of Science (SC) sets priorities for future facilities**

- SC 20-year Facilities Plan announced by DOE Secretary on November 10<sup>th</sup>
- RIA Mission Need (CD-0) signed - anticipate 12 GeV Upgrade CD-0 will be signed

## **Reviews and NSAC Charges**

- NSAC NP Committee of Visitors : visited December 2003: Report due end of February
- Laboratory Research Reviews: Heavy Ion Subprogram : January 2004
- NSAC Charge: Comparison GSI and RIA: Report due end of February
- New Charge: Review of the DOE Heavy Ion program: Report due end of August

## **Office of Science Reorganization: Office of Nuclear Physics**

- Acting Division Directors named: Eugene Henry and Jehanne Simon-Gillo
- New positions will be advertised – Detailee/IPA positions to be filled



# Office of Nuclear Physics

